



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,990	12/19/2001	Philip G. Perry	D/A0438Q	1514

7590 05/24/2004

Patent Documentation Center  
Xerox Corporation  
Xerox Square 20th Floor  
100 Clinton Ave. S.  
Rochester, NY 14644

EXAMINER

NOLAN, SANDRA M

ART UNIT	PAPER NUMBER
----------	--------------

1772

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/020,990

Applicant(s)

PERRY ET AL.

Examiner

Sandra M. Nolan

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12-19-01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claims***

1. Claims 1-20 are pending.

### ***Election/Restrictions***

2. The restriction requirement of 08 March 2004 is hereby withdrawn and all groups of claims are rejoined.

### ***Information Disclosure Statement***

3. The information disclosure statement (IDS) submitted on 19 December 2001 was considered by the examiner.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner is unsure what the limitation regarding "the surface area of a hypothetical first(second) region" is supposed to mean. If something is hypothetical, it does not exist, so that its measurement is of little meaning. Furthermore, any feature that limits the size/function of a physical object should be described in terms of one or physical objects recited in the claims.

Please clarify the claims.

Art Unit: 1772

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 4 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hughes (US 4,627,808).

Hughes shows the production of cylindrical capsules using dipping pins that are elliptical in shape (col. 6, lines 13-19) to produce grooves in one or more of the capsules parts. See Figures 8, 11, 13 and 14. The grooves are level regions between the ends of the pins.

The coated pins are tapered (Figures 5 and 6).

The examiner notes that tapered or stepped ends will inherently have greater surface area than ends that have the same diameter as the rest of a cylindrical body.

Without a clear understanding of the significance of applicants' hypothetical surface area limitation, it will be given no weight.

8. Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Crump (US 5,385,759)

Crump teaches cylindrical substrates onto which charge transport coatings will be applied (co. 6, line 51). The substrates having tapered regions (22, 26, and 32) adjacent level regions (24 and 30). Its substrates are dip coated (col. 1, line 13).

Art Unit: 1772

The examiner notes that tapered portions will inherently have greater surface area than ends that have the same diameter as the rest of a cylindrical body.

Without a clear understanding of the significance of applicants' hypothetical surface area limitation, it will be given no weight.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

11. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbert (US 5,683,742) in view of Crump (US 5,385,759).

Herbert teaches selectively coating substrates by treating some areas with a nonwetting material and dipping the substrates into coatings (abstract). Cylinders can be coated with its technique (see claim 1 of the patent), which can have conducting layers thereon (col. 5, lines 60).

It fails to teach substrates with level intermediate areas and recessed ends.

Art Unit: 1772

Crump is discussed above.

The patents are analogous because both deal with coated cylinders for use in conductive applications.

It would have been obvious to one having ordinary skill in the art at the time that the invention was made to employ the coating technique of Herbert to coat the substrates of Crump with conductive coatings in order to make some areas thereon conductive and others less conductive.

The motivation to employ the Crump substrates in the technology of Herbert is found at col. 6, line 51 of Crump, where charge transfer coatings are taught.

It is deemed desirable to make charge transfer coated substrates that have areas thereon that are not conductive in order to facilitate their handling.

The examiner notes that tapered portions will inherently have greater surface area than ends that have the same diameter as the rest of a cylindrical body.

Without a clear understanding of the significance of applicants' hypothetical surface area limitation, it will be given no weight.

The presence of grooves/steps in the coated substrates is deemed a matter of engineering choice depending upon the shape of the substrate needed for a particular purpose. It is noted that applicants are claiming "an apparatus" and the coating of "a substrate" broadly and are not limiting their claims to a particular types of apparatus.

Art Unit: 1772

**Conclusion**

Any inquiry concerning this communication should be directed to Sandra M. Nolan, whose telephone number is 571/272-1495. She can normally be reached on Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

If attempts to reach the examiner are unsuccessful, her supervisor, Harold Pyon, can be reached at 571/272-1498.

The fax number for patent application documents is 703/872-9306.



S. M. Nolan  
Primary Examiner  
Technology Center 1700

SMN/smn  
10020990(20040518)